

WHAT IS CLAIMED IS:

1. A method of streaming data units to terminals, the method comprising:
using a duplicating switch to receive a first stream of data units;
using the duplicating switch to store content from the first stream;
5 using the duplicating switch to generate second streams that incorporate the stored
content for use by more terminals having addressing information that was not part of the first
stream; and
using the duplicating switch to make the second streams available to the terminals,
wherein the duplicating switch is configured to duplicate one or more portions of the
10 first stream.
2. The method of claim 1 wherein using the duplicating switch to store content
includes storing content that is temporally related to the data units that are being generated.
- 15 3. The method of claim 1 further comprising using a location identifier to indicate
which portion of content is being generated into the second streams.
4. The method of claim 3 further comprising using location identifiers to access the
content time-shifted as two different streams.
- 20 5. The method of claim 1 wherein using the duplicating switch to store content
includes storing more than one instance of the same portion of content.
6. The method of claim 5 wherein using the duplicating switch to store content
25 includes storing additional instances of the stream as demand for the content increases.
7. The method of claim 1 wherein using the duplicating switch to store content
includes storing content and associated header information.

8. The method of claim 1 wherein using the duplicating switch to store content includes storing a checksum describing the content.

9. The method of claim 1 wherein at least one of the second streams is transmitted in response to receiving a request from a terminal.

10. The method of claim 1 wherein the second stream is transmitted in response to receiving a request from a service provider.

11. The method of claim 1 wherein:
storing the content includes using location identifiers to track simultaneous transmissions of a single stored instance of a stream, and
transmitting includes transmitting the different data units within the single stored instance to several requestors who have terminals receiving the stream that overlap but differ by a time differential.

12. The method of claim 1 wherein the duplicating switch is a specialized device including hardware configured to perform one or more of receiving a first stream of data units, storing content from the first stream, generating second streams, and making the second streams available.

13. A duplicating switch comprising:
means for receiving a first stream of data units;
means for storing content from the first stream;
generating means for generating second streams that incorporate the stored content for use by more terminals having addressing information that was not part of the first stream, the generating means being configured to duplicate one or more portions of the first stream; and
means for making the second streams available to the terminals.

14. The duplicating switch of claim 13 wherein means for storing content includes means for storing content that is temporally related to the data units that are being generated.

15. The duplicating switch of claim 14 further comprising means for using a location identifier to indicate which portion of content is being generated into the second streams.

5 16. The duplicating switch of claim 15 further comprising means for using location identifiers to access the content time-shifted as two different streams.

17. The duplicating switch of claim 13 wherein means for storing content includes means for storing more than one instance of the same portion of content.

10 18. The duplicating switch of claim 17 wherein means for storing content includes means for storing additional instances of the stream as demand for the content increases.

15 19. The duplicating switch of claim 13 wherein means for storing content includes means for storing content and associated header information.

20 20. The duplicating switch of claim 13 wherein means for storing content includes means for storing a checksum describing the content.

21 21. The duplicating switch of claim 13 wherein the means for making the second streams available include means for transmitting at least one of the second streams in response to receiving a request from a terminal.

25 22. The duplicating switch of claim 13 wherein the second stream is transmitted by the means for making it available in response to receiving a request from a service provider.

23. The duplicating switch of claim 13 wherein:
means for storing the content includes means for using location identifiers to track simultaneous transmissions of a single stored instance of a stream, and

means for transmitting includes means for transmitting the different data units within the single stored instance to several requestors who have terminals receiving the stream that overlap but differ by a time differential.

24. The duplicating switch of claim 13 wherein the generating means include a specialized device including hardware configured to perform one or more of receiving a first stream of data units, storing content from the first stream, generating second streams, and making the second streams available.

25. A duplicating switch comprising:
a first communications interface structured and arranged to receive a first stream of data units;
a storage processor structured and arranged to store content from the first stream;
a switching processor structured and arranged to generate second streams that incorporate the stored content for use by more terminals having addressing information that was not part of the first stream, the switching processor being configured to duplicate one or more portions of the first stream; and
a second communications interface structured and arranged to make the second streams available to the terminals.

26. The duplicating switch of claim 25 wherein the storage processor is structured and arranged to store content that is temporally related to the data units that are being generated.

27. The duplicating switch of claim 26 further comprising a first memory processor structured and arranged to use a location identifier to indicate which portion of content is being generated into the second streams.

28. The duplicating switch of claim 27 further comprising a second memory processor structured and arranged to use location identifiers to access the content time-shifted as two different streams.

29. The duplicating switch of claim 25 wherein storage processor is structured and arranged to store more than one instance of the same portion of content.

5 30. The duplicating switch of claim 29 wherein the storage processor is structured and arranged to store additional instances of the stream as demand for the content increases.

31. The duplicating switch of claim 25 wherein the storage processor is structured and arranged to store content and associated header information.

10 32. The duplicating switch of claim 31 wherein the storage processor is structured and arranged to store a checksum describing the content.

15 33. The duplicating switch of claim 25 wherein the second communications interface is structured and arranged to make at least one of the second streams available in response to receiving a request from a terminal.

20 34. The duplicating switch of claim 25 wherein the second stream is transmitted by the second communications interface in response to receiving a request from a service provider.

35. The duplicating switch of claim 25 wherein:
the storage processor is structured and arranged to use location identifiers to track simultaneous transmissions of a single stored instance of a stream, and
25 the second communications interface is structured and arranged to transmit the different data units within the single stored instance to several requestors who have terminals receiving the stream that overlap but differ by a time differential.

30 36. The duplicating switch of claim 25 wherein the switching processor is a specialized device including hardware configured to perform one or more of receiving a first

stream of data units, storing content from the first stream, generating second streams, and making the second streams available.